

Applicant: Sebastian KANNE et al.
Docket No. R.305558
Preliminary Amdt.

NEW ABSTRACT:

Please replace the original abstract with the following new abstract:

A fuel injector having a piezoelectric actuator in an injector body and held in contact with the injector body on one side and with a sleeve-like booster piston on the other via first spring means. A nozzle body joined to the injector body and a stepped nozzle needle is guided in the body. A second spring disposed inside the booster piston which together with the injection pressure acting on the back side of the nozzle needle keeps the nozzle needle in the closing position. A control chamber on the end toward the nozzle needle of the booster piston communicates, via at least one leakage gap with a fuel supply at injection pressure, and the nozzle needle is urged in the opening direction by the fuel located in the control chamber. The booster piston actuated by the piezoelectric actuator is spatially associated directly with the nozzle needle so that the nozzle needle is fitted, with a rear region that has a larger diameter than a region of the nozzle needle toward the nozzle outlet, into the inner chamber of the booster piston.